

ABSTRACT OF THE DISCLOSURE

RADIOFREQUENCY TRANSMITTER WITH A HIGH DEGREE OF
INTEGRATION AND POSSIBLY WITH SELF-CALIBRATING IMAGE

DELETION

The invention relates to a radiofrequency transmitter, of the type supplied with two signals in baseband and in quadrature, $i(nT)$ and $q(nT)$, which are images from two binary streams representing information to be transmitted.

According to the invention, the radiofrequency transmitter comprises : means (1) of transposition into an intermediate frequency and digital processing, providing a first transposition into the digital domain, at an intermediate frequency ω_0 , for said baseband signals, and generating, by combination, two signals of intermediate frequency in quadrature; means (2) of direct conversion, providing a second transposition into the analog domain, after multiplication by a frequency ω_1 , followed by a summation of said two signals at intermediate frequency and in quadrature, in such a way that a resultant signal is generated which is found finally around a frequency ω_2 , where $\omega_2 = \omega_0 + \omega_1$.

In an advantageous variant, the radiofrequency transmitter additionally comprises means of digitally compensating gain and phase imperfections in said means of direct conversion.